



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/519,003

12/27/2004

Shinji Naruse

2004_2036A

7588

513 7590 03/17/2009

WENDEROTH, LIND & PONACK, L.L.P.

1030 15th Street, N.W.,

Suite 400 East

Washington, DC 20005-1503

EXAMINER

ALEJANDRO, RAYMOND

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

03/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/519,003	Applicant(s) NARUSE, SHINJI	
	Examiner Raymond Alejandro	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-15 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This office action is issued in response to applicant's communication dated 02/19/09.

The 35 USC 102 rejection over Butman Jr et al has been overcome by the applicant. Refer to the abovementioned amendment for substance of applicant's rebuttal arguments and remarks. Thus, the present claims are finally rejected over the same art as composed hereinbelow on the written record:

Election/Restrictions

1. Claims 13-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 05/07/08 and the office action dated 07/14/08.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al 5076864.

The present application is to a separator wherein the disclosed inventive concept comprises a coating material on a separating feature.

As to claims 12 and 15:

Tanaka et al disclose a multilayer printed wiring board (*the electrical/electronic part*) (Abstract/COL 1, lines 5-10 and 20-23/COL 3, lines 37-40) wherein the materials which can be used for laminating the internal layer boards include reinforcing material or a base material such as silica and/or aramid fabric (COL 3, lines 10-25). Tanaka et al expressly disclose that mixtures thereof (*←emphasis supplied*) can be employed therein (COL 3, lines 21-22). *Thus, Tanaka et al at once envisage combining both materials in an electrical/electronic part to form a separating feature therein.*

1st Examiner's note: as to the method limitation "subject to heat treatment before and/or after coated", it is noted that a method limitation incorporated into a product claim does not patentable distinguish the product because what is given patentably consideration is the product itself and not the manner in which the product was made. Therefore, the patentability of a product is independent of how it was made. As a result, the process steps of a product-by-process claim do not impart any significant property or structure to the claimed end product. And, if there is any difference, the difference would have been minor and obvious. Determination of patentability of a product-by-process claim is based on the scope of the product itself.

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."

In re Thorpe 777 F.2d 695, 698, 227 USPQ 964,966 (Fed Cir. 1985) and MPEP 2113.

2nd Examiner's note: *the specific "sucking height" (or electrolyte retention) is deemed to be an inherent property or characteristic of the separator which is associated to the construction material thereof and its coating. For instance, applicant states that "The separator of this invention which has been coated in the aforementioned manner has good electrolyte retention owing to coating". "The electrolyte retention of the coated separator of this invention as shown by the above-mentioned formula (1) [equation 1 $\rightarrow h2\eta/\gamma$] is 0.7 mm or more" (See applicant's specification at page 5, lines 3-21). Thus, having been made both separators (applicant's separator and the prior art separator) of the same construction material, then, it can be fairly argued that the separator of the prior art must have the same properties.*

Accordingly, products of identical chemical composition can not have mutually exclusive properties, and thus, the claimed property (i.e. the specific "sucking height" or electrolyte retention), is necessarily present in the prior art material.

"Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

See MPEP 2112.01 [R-3] Composition, Product, and Apparatus Claims

Thus, the present claims are anticipated.

Art Unit: 1795

4. Claims 12 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Curcio et al 2002/0179334.

As to claims 12 and 15:

Curcio et al disclose an interconnect between layers of a multilayer circuit board or printed wiring board or chip carrier material (*the electrical/electronic part*) (Abstract/P0002-0004, 0029) wherein the first layer 12A therefor includes a reinforced material such as silica and additionally the first layer 12A may include polyamide films having an adhesive layer on either side such as an aramid paper (P0029). *Thus, Curcio et al at once envisage combining both materials in an electrical/electronic part to form a separating feature therein.*

1st Examiner's note: *as to the method limitation "subject to heat treatment before and/or after coated", it is noted that a method limitation incorporated into a product claim does not patentable distinguish the product because what is given patentably consideration is the product itself and not the manner in which the product was made. Therefore, the patentability of a product is independent of how it was made. As a result, the process steps of a product-by-process claim do not impart any significant property or structure to the claimed end product. And, if there is any difference, the difference would have been minor and obvious. Determination of patentability of a product-by-process claim is based on the scope of the product itself.*

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."
In re Thorpe 777 F.2d 695, 698, 227 USPQ 964,966 (Fed Cir. 1985) and MPEP 2113.

2nd Examiner's note: *the specific "sucking height" (or electrolyte retention) is deemed to be an inherent property or characteristic of the separator which is associated to the construction*

Art Unit: 1795

material thereof and its coating. For instance, applicant states that “The separator of this invention which has been coated in the aforementioned manner has good electrolyte retention owing to coating”. “The electrolyte retention of the coated separator of this invention as shown by the above-mentioned formula (1) [equation 1 $\rightarrow h^2 \eta / \gamma$] is 0.7 mm or more” (See applicant’s specification at page 5, lines 3-21). Thus, having been made both separators (applicant’s separator and the prior art separator) of the same construction material, then, it can be fairly argued that the separator of the prior art must have the same properties.

Accordingly, products of identical chemical composition can not have mutually exclusive properties, and thus, the claimed property (i.e. the specific “sucking height” or electrolyte retention), is necessarily present in the prior art material.

“Products of identical chemical composition can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

See MPEP 2112.01 [R-3] Composition, Product, and Apparatus Claims

Thus, the present claims are anticipated.

5. Claims 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese publication JP 2000-125499 (hereinafter referred to as the JP’499).

As to claims 12 and 15:

The JP’499 divulges a fixing member of a coil exhibiting conductivity (*the electrical-electronic part*) (Abstract) consisting of a laminated sheet comprising an aramid fiber paper 18

which a reinforcing layer and a high thermal conductivity silicon-based sheet 19 forming a fixing member for separation or interconnection (Abstract). *Thus, the JP'499 at once envisages combining both materials including a silicon-based material in an electrical/electronic part to form a separating feature therein.*

1st Examiner's note: *as to the method limitation "subject to heat treatment before and/or after coated", it is noted that a method limitation incorporated into a product claim does not patentable distinguish the product because what is given patentably consideration is the product itself and not the manner in which the product was made. Therefore, the patentability of a product is independent of how it was made. As a result, the process steps of a product-by-process claim do not impart any significant property or structure to the claimed end product. And, if there is any difference, the difference would have been minor and obvious. Determination of patentability of a product-by-process claim is based on the scope of the product itself.*

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."
In re Thorpe 777 F.2d 695, 698, 227 USPQ 964,966 (Fed Cir. 1985) and MPEP 2113.

2nd Examiner's note: *the specific "sucking height" (or electrolyte retention) is deemed to be an inherent property or characteristic of the separator which is associated to the construction material thereof and its coating. For instance, applicant states that "The separator of this invention which has been coated in the aforementioned manner has good electrolyte retention owing to coating". "The electrolyte retention of the coated separator of this invention as shown by the above-mentioned formula (1) [equation 1 $\rightarrow h^2 \eta / \mu$] is 0.7 mm or more" (See applicant's specification at page 5, lines 3-21). Thus, having been made both separators (applicant's*

separator and the prior art separator) of the same construction material, then, it can be fairly argued that the separator of the prior art must have the same properties.

Accordingly, products of identical chemical composition can not have mutually exclusive properties, and thus, the claimed property (i.e. the specific "sucking height" or electrolyte retention), is necessarily present in the prior art material.

"Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

See MPEP 2112.01 [R-3] Composition, Product, and Apparatus Claims

Thus, the present claims are anticipated.

Response to Arguments

6. Applicant's arguments filed 02/19/09 have been fully considered but the examiner remains unpersuaded.

7. Applicant's arguments, filed 02/19/09, with respect to the rejection under Section 102 based Butman Jr et al have been fully considered and are persuasive. Since the rejection has been withdrawn, it is unnecessary to address applicant's arguments concerning the aforementioned reference.

8. The central point of contention raised by the applicant is based upon the allegation that the prior art references do not disclose "*a separator for electrical and electronic parts*". In response, applicant is reminded that a recitation of the intended use of the claimed invention

Art Unit: 1795

must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Even if assumed, arguendo, that applicant's invention is "*a separator for electrical and electronic parts*", the recitation "*for electrical and electronic parts*" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Applicant is instructed that the invention in question merely calls for "a separator" which is any feature or anything capable of: i) acting as a separating element, or ii) separating one member from another independently of the final chemical environment, functional environment or structural arrangement. Thus, it is contended that the multilayer printed wiring/circuit boards or chip carrier material of either Tanaka et al or Curcio et al, and/or the fixing member of the JP'499, when placed in their respective chemical environment, functional environment or structural arrangement, are capable of physically separating one element from another. Indeed, the multilayer printed wiring/circuit boards or chip carrier material of either Tanaka et al or Curcio et al are both electrical and electronic parts, and are members of a electrical and electronic system.

9. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "*the separator*

Art Unit: 1795

of the present invention which is porous") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant has contended that "*the separator of the present invention is porous*", a detailed inspection of independent claim 12 does not reveal what applicant is sustaining. A reproduction of the claim's most relevant part in this respect follows: "*A separator...in the form of paper made from aramid, non-woven fabric made from aramid, fine porous film made from aramid, or composite thereof...*". As apparent from the foregoing, there are four (4) different alternatives for the separator where three (3) of them are not required to be porous, and only one (1) of them appears to be a porous film. Thus, applicant's separator is not necessarily a porous one as instantly sustained. One more crucial aspect is that the claimed film or composite is **coated**, and thus, if the pores are coated, then there is a coating on the pores [sic]. As such, the coated film or composite is not porous or show an increasingly reduced porosity.

10. With respect to applicant's allegation that the corresponding separators of the prior art have a sucking height of 0, the examiner does not necessarily agree with that characterization. In this respect, applicant has not provided objective or sound evidence to demonstrate why he or she believes the separating features of the prior art do not satisfy the claimed requirement. The only supporting comment made by the applicant relates to the layers of Tanaka et al and Curcio et al which are said to be "solid", not porous. Other than that comment, there is nothing else on the written record showing or quantifying the sucking height of the prior art separating features. Nonetheless, the examiner asserts that it is not enough that applicant's representative personally believes that the prior art does not teach such sucking height or cannot function as a separator

Art Unit: 1795

having the intended sucking height. That is to say, the arguments of counsel cannot take the place of evidence in the record. An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of inherent anticipation/obviousness (See ***MPEP 716.01 and 2145: Consideration of Applicant's Rebuttal Arguments***).

11. (*secondary limitations not recited in the present claims which are less critical for defining subject matter*) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "density", "porosity", "hydrophilicity" not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In a straightforward manner, applicant has briefly discussed certain properties such as "density", "porosity" and "hydrophilicity" which are apparent in the claimed separator. Here is the issue, if applicant believes they are all inherently present in the claimed separator, then applicant also must accept that the same properties are inherently present in the disclosed separators as they are made of substantially the same materials as applicant's separator. To show otherwise, applicant must supply objective evidence demonstrating meaningful and unobvious differences between the disclosed separators and the claimed separators. Now if applicant believes the properties are not inherent but are worth arguing them because they fully characterize applicant's separator, then those properties and their respective "degrees or magnitudes" (i.e. degree of porosity or hydrophilicity, or specific density) should be included in the present claims for evaluation on their merits.

12. It is noted that page 2 of “Remark” section appears to contain informal and non-initialed corrections made by applicant’s representative. Even though they have not caused a great deal of confusion for understanding the merits of the remarked arguments, they represent informalities. Applicant is kindly requested to avoid such informal matters in order to prevent confusion, uncertainty or ambiguities during prosecution.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Alejandro whose telephone number is (571) 272-1282. The examiner can normally be reached on Monday-Thursday (8:00 am - 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raymond Alejandro/
Primary Examiner, Art Unit 1795